

FORRAI, Sandor

General solution of the minimum of weighted sums in case of their fixed arrangement. Muszaki kozl MTA 32 no.1/4: 213-220 '63.

1. Nehezipari Muszaki Egyetem Banyamuvelestani Tanszek, Miskolc.

FORRAI, S.

Simple determination of the direct tangent of the bearing of an
adjusting straight line which satisfies the condition $\sum p e^2 = \min$
Acta techn Hung 47 no. 1/2:97-108 '64.

1. Department of Mine Exploitation, Technical University of
Heavy Industry, Miskolc.

ABRUDAN, V., ing.; CIOBANU, M., ing.; PETRESCU, Gh., ing.; VILVOI, V.; IONESCU, C., ing.; KESTENBAUM, S.; FORRAI, St., ing.; FUCIU, Martian; NILA, Vasile, ing.; AROMINESEI, Alexandru; MORARU, Nicolae, ing.; BOGHICI, A.; SIMIONESCU, M.

Reduction of specific consumptions of metal. Probleme econ 17 no.12:137-141 D '64.

1. Technical Director, Arad Plant of Railroad Cars (for Abrudan). 2. Chief Technologist, Arad Plant of Railroad Cars (for Ciobanu). 3. Technical Director, "1 Mai" Plant, Ploiesti (for Petrescu). 4. Chief Planning Engineer, "1 Mai" Plant, Ploiesti (for Vilvoi). 5. Director, "Infratirea" Machine Tool Plant, Oradea (for Ionescu). 6. Assistant Chief Engineer, "Infratirea" Machine Tool Plant, Oradea (for Kestenbaum). 7. Chief Technologist, "Infratirea" Machine Tool Plant, Oradea (for Forrai). 8. Director, Arad Plant of Lathes (for Fuciu). 9. Chief Technologist, Arad Plant of Lathes (for Nila). 10. Chief Engineer, Arad Plant of Lathes (for Arominesei). 11. Technical Director, "Independenta" Plant, Sibiu (for Moraru). 12. Director, Sinaia Mechanical Plant (for Boghici). 13. Chief Engineer, Sinaia Mechanical Plant (for Simionescu).

FORRAINE Banlaki, Erzsebet, dr.

"Studies in experimental psychology", edited by Alexandru
Rosca. Reviewed by Mrs. Erzsebet Forrai nee Banlaki. Magy
pszichol szemle 20 no.3:478-480 '63.

Forrat E.G.

USSR/Chemical Technology - Chemical Products and Their
Application. Ceramics. Glass. Binders. Concrete.

H-7

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 2113

Author : Forrat E.G.

Inst : -

Title : Use of Finely Granulated Sand in Building Mortars.

Orig Pub : Str-vo predpriyatiy nef. prom-sti, 1957, No 4, 8-11

Abstract : A study is made of the possibility of a partial replacement of the medium grain-size sand (average particle size 0.28-0.32 mm), which has to be shipped from another place, used in making building mortar, by a local finely granular sand (size modulus 0.01), containing 99.3% of particles of less than 0.15 mm, including 16.5% of clayey and pulverulent particles. It was found that water/cement ratio is increased on increasing the content of finely granulated sand and on decreasing the content of cement per 1 m³ of expenditure and increases on

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USSR/Chemical Technology - Chemical Products and Their
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H-7

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2113

partial replacement of medium size sand by the finely granulated sand, which is due to a decrease of the total amount of void space. In the experiments which were carried out the optimum content of finely granulated sand amounted to 30-35% of the weight of sand mixtures. On mixing medium size and finely granulated sand the volume of the mixture amounts to approximately 94% of the sum of the initial volumes of the two kinds of sand. However, the yield final mix varies but little, which is due to the fact that mixes made with a mixture of sand require more water than mixes made with only medium size sand. When a mixture of the two kinds of sand is used a more prolonged stirring in the mortar mixer is required.

Card 2/2

FORRO, Albert, dr.

An appeal: Energia es atom 16. 4:158 Ap '63.

1. Energia Világkonferencia Magyar Nemzeti Bizottsága elnöke.

FORRO, Dezső; GAL, István

Electronic circuits of long-distance dialing. Magy hir techn 12 no.2:
64-69 Ap '61,

1. Beloiannis Híradastechnikai Gyar.

FORNO, Denso

The 400 line crossbar substation manufactured by the Beloiannisz Telecommunication Factory. Hir techn 15 no. 6:179-132 Je '64.

1. Beloiannisz Telecommunication Factory. Budapest.

FORRO, Henrik (Budapest); BODIS, Andras (Budapest); GERA, Janos (Budapest).

Forum of innovators. Ujit lap 16 no.13:30 10 J1 '64.

TOMPA, Ferenc, dr.; FAJZI, Karoly, dr.; FORRO, Istvan, dr.

On the role of glucocorticoids in decreasing surgical risk. Magyar sebészet 14 no.3:153-157 Je '61.

1. Matrahazai Allami Tudobeteggyogyintezet (Igazgatoforvos: Lanyi Andor dr.) Tudosebeszeti Osztalyanak (Osztalyvezeto: Tompa Ferenc dr.) kozlemenye.

(SURGERY OPERATIVE compl)
(ADRENAL CORTEX HORMONES ther)

FORRO, Istvan, dr.; TOMPA, Ferenc, dr.; FAJZI, Karoly, dr.

Results of intravenous barbiturate with N₂O anesthesia. Magy. sebesset
14 no.6:386-390 D '61.

(BARBITURATES anesth & analg)
(NITROUS OXIDE anesth & analg)
(ANESTHESIA INTRAVENOUS)

TOMPA, Ferenc, dr.; FAJZI, Karoly, dr.; FORRO, Istvan, dr.

Indications and immediate results of open treatment of caverns.
Tuberkulozis 17 no.5:142-145 My '64.

1. Szamuelly Tibor TBC Gyogyintezet es a Matrahazai All. TBC Gyogyintezet kozlemenye.

FAYZI, Karoly, dr.; TOMPA, Ferenc, dr.; FORRO, Istvan, dr.

Circumscribed pulmonary aspergillosis. Tuberkulozis 17 no.8:
239-244 Ag '64.

1. A Matrahazai All. TBC Gyógyintézet. Dr. Szamuelv Tibor TBC
Gondozás és Gyógyintézet közleménye.

11E

Increase in capillary resistance with high doses of vitamin D₃. László Ruzs and László Székely (Univ., Szeged, Hung.). *Magyar Belorosi Arch.* 3, 64-6(1950).—The

capillary resistance detd. with the Ruzs app. increased by 100-120% upon daily administration of 1.5×10^6 units vitamin D₃ for 3-4 weeks to men and increased by 450% in guinea pigs with 6-12,000 units/day for 15 days. The capillary resistance was independent of the Ca level of the blood. No toxic effects from the vitamin doses were observed on guinea pigs.

István Földi

FOERO, L.; SZEGO, L.

Studies on the antihistaminic properties of PAS. Acta physiol. hung.
2 no.3-4:415-421 1951. (CLML 22:1)

1. Of the Dermatological and Venereological Clinic of Szeged University.

FORNO

KOCSIS, A.; NANASI, P.; FORRO, I.; FEKETE, Z.

Laboratory data on the prevention of bismuthia. Orv. hetil.,
Budap. 92 no.28:909-912 15 July 1951. (CLML 20:11)

1. Doctors. 2. Skin and Venereal Diseases Clinic (Director --
Prof. Dr. Lajos Szodoray), Debrecen Medical University; Skin
and Venereal Clinic (Director -- Prof. Dr. Tamas Ravnay),
Szeged Medical University.

RAVNAY, T.;FORRO, L.;SZEGO, L.

Studies relative to the mode of action of the thiosemicarbazones.
Borogygy. vener. szemle 7 no.3:65-71 May 1953. (CLML 25:1)

1. Doctors. 2. Skin and Venereal Diseases Clinic (Director -- Prof.
Dr. Tamas Ravnay), Szeged Medical University.

2425

FORRO, L.; ABRANDI, E.

A new simple method of injection into lymphatic vessels of laboratory animals. Acta physiol. hung. 6 no.2-3:347-350 1954.

1. Klinik fur Haut-und Geschlechtskrankheiten und Institut fur Chirurgie, Anatomie und Operationslehre der Medizinischen Universitat, Szeged.

(INJECTION

in lymphatic vessels, appar. for laboratory animals)

(LYMPHATIC VESSELS

inject. into, appar. for laboratory animals)

(LABORATORY ANIMALS

inject. method in lymphatic vessels, appar.)

FORRO, László; ABRANDI, Endre

A new simple method of injection into lymphatic vessels of experimental animals. Kiserletes orvostud. 6 no.6:538-540 Nov 54.

1. Szegedi Orvostudományi Egyetem Bor-, és Hemibeteg Klinikája
és Sebészeti-Anatómiai és Műtettani Intézete.

(INJECTIONS

into lymphatic vessels, appar. for small laboratory animals)

(LYMPHATIC VESSELS

inject. appar. for small laboratory animals)

1601. Prevention by penicillin in animals of bisinuth dark border
line and stomatitis. L. Forró, A. Traub, and L. Szádeczky *Dermato-*
logica, Basel, 1955, III, 150-156 (Skin Clinic, Univ. of Szeged,
Hungary).—In cats with a silk thread passed through the gingiva
Bi injections produced a Bi gingival border and stomatitis after
5-6 days. When penicillin was given at the same time, the Bi
border appeared much later, and the stomatitis not at all. (German)
W. R. Bett.

3

KOVATS, Tibor, Guorgy.; MAGOS, Laszlo.; FORRO, Laszlo.; FISCHER,
Gyorgy, LUKACS, Ida.

Schwartzmann phenomenon induced by azoprotein from homologous
and heterologous serums. Kiserletes orvostud. 7 no.1:92-95 Jan 55.

1. Szegedi Orvostudományegyetem Kozegeszazsgtani Intezete es Bor- es
Nemibeteg Klinikaja.

(ALLERGY, experimental,

Schwartzmann phenomenon induced by azoprotein from
homologous & heterologous serums)

Forró, L. 1955, 7, 113-118. — Rabbits given an intradermal injection of a filtrate of *E. coli* are sensitised with *p*-aminobenzoic acid serum azoproteins of heterologous and homologous sera. An i.v. injection of either of the two serum azoproteins elicits the Shwartzman haemorrhagic, necrotic dermal inflammation at the site of the intradermal injection. No correlation was found between the intensity of Shwartzman reaction and the amount of circulating antibodies or the homologous or heterologous nature of the protein component. It is assumed that in certain necrotic-haemorrhagic inflammations the proteins of the organism become modified into antibodies which, in turn result in an antigen-antibody reaction, giving rise to inflammation. (Hungarian) A. B. L. BENJAMIN.

mek 5

GYULA, Ivady, dr.; FORRO, Laszlo, dr.

Treatment of acne vulgaris and dermatitis seborrheides with
cholesterin. Bogyogy. vener. szemle 9 no.3:80-83 May 55

1. A Szegedi Orvostudományi Egyetemi Gyermekklinika (igazgató:
Waltner Karoly dr. egyetemi tanár) és Bor- és Nemibeteg Klinika
(igazgató: Ravnay Tamas dr. egyetemi tanár) közleménye.

(ACNE, therapy
cholesterol)

(DERMATITIS SEBORRHEICA, therapy
cholesterol)

(CHOLESTEROL, ther. use
acne & dermatitis seborrheica)

FORRO, Laszlo, dr.; TRAUB, Alfred, dr.; SZADECZKY, Laszlo, dr.

Prevention of the formation of a bismuth film, and of subsequent stomatitis, by means of penicillin in animal experiments. *Borogy. vener. szemle* 9 no.6:221-224 Nov 55.

1. A Szegedi Orvostudományi Egyetemi Bor- és Nemibeteg Klinika (igazgató: Ravnay, Tamas, dr. egyetemi tanár) és Kórház és Kórházvezetői Intézet. (igazgató: Kórpássy, Béla, dr. egyetemi tanár) közleménye.

(STOMATITIS, experimental

caused by bismuth film in cats, prev. eff. of penicillin)

(BISMUTH, toxicity

stomatitis, in cats, prev. eff. of penicillin)

(PENICILLIN, effects

on exper. bismuth stomatitis in cats, prev. eff.)

EXCERPTA MEDICA Sec.13 Vol.11/1 Dermatology, etc. Jan 57

220. FORRÓ L., TRAUB A. and SZÁDECZKY L. Szegedi Orvostud. Egyet. Bőr-
es Nemibeteg Klin., Kórbonctani és Kórszövettani Int. Közl. *A bismuth-
szegély és stomatitis kivédése penicillinnel állatkísérletekben. Preven-
tion of the bismuth line and stomatitis from penicillin
in animal experiments BÖRGYÓGY. VENER. SZLE 1955, 31/6 (221-
224) Tables 1 Illus. 2

GDR / Human and Animal Physiology (Normal and Pathological). Skin. T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 98009

Author : Ivady, Gy.; Forro, L.; Nagy. I.

Inst : Not given

Title : The Study of Cholesterin Influence on the Function of Sebaceous Glands

Orig Pub: Dermatol. Wochenschr., 1957, 136, No 30, 801-804

Abstract: To rats at the age of about one year, a 0.5-3 percent solution of pure cholesterin (C) in sunflower oil (every other day, 25 injections altogether; total dose of the injected C varied from 1.5 to ss.5 mg/kg) was injected intramuscularly. Control animals received only oil injections. Before and

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GDR / Human and Animal Physiology (Normal and Pathological). Skin. T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 98009

after the experiment, a biopsy of skin fragment from the back was performed and histochemical investigations of sebaceous gland ester activity was conducted. After injection of C, the activity decreased, corresponding to the introduced dose. The data may be utilized in the practice of treatment of C of acne, particularly of adolescent blackheads. --A. S. Raben

Card 2/2

IVADY, Gyula, dr.; FORRO, Iaszlo, dr.; NAGY, Istvan, dr.

Experiments on the influence of cholesterol on the function of the sebaceous glands. Borgyogy. vener. szemle 11 no.2-3:76-78 Apr-June 57.

1. A Szegedi Orvostudományegyetemi Gyermekklinika (igazgató: Waltner Karoly dr. egyetemi tanár), Bor- és Nemibeteg Klinika (igazgató: Ravnay Tamás dr. egyetemi tanár), Bonctani és Szövet-Fejlődéstan Intézet (igazgató: Gellert Albert dr. egyetemi tanár) közleménye.

(CHOLESTEROL, eff.

on non-specific esterase activity in rat sebaceous glands (Hun))

(ESTERASES

in sebaceous glands, eff. of cholesterol on non-specific activity in rats (Hun))

(SEBACEOUS GLANDS, eff. of drugs on

cholesterol, on non-specific esterase activity in rats (Hun))

EXCERPTA MEDICA Sec 13 Vol 13/5 Dermatology May 59

1231. REMOVAL OF FRECKLES WITH CARBOLIC ACID - A karbolsavas ephell-seltávolítással szerzett tapasztalataink - Forró L. - BÖRGYÓGY VENER. SZLE 1958, 24/1-2 (67-70) Illus. 2

Winter's method of removal of freckles with liquid carbollic acid and sulphuric acid (1:3; Brit. J. Dermat., 1950, 62, 83 and Exc. Med. S. XIII, Vol. 5, abstr. no. 155) was retested. The recurrence rate is 10-50%. Under the conditions described, treatment can be carried out without risk in outpatients. Pigmented spots after healing of the skin inflammation can be removed by peeling and destaining methods. Bielický - Prague

FORRO, László, dr.; BOGDAN, Erno, dr.

Experiments in the treatment of psoriasis with Antaethyl-shock.
Borgyogy vener. szemle. 40 no.4:164-167 Ag '64.

1. A Szegedi Orvostudományi Egyetem Bor- és Nemibeteg Klinika
(Igazgató: dr. Ravnay Tamás egyetemi tanár) és Ideg- és
Elmebeteg Klinika (Igazgató: dr. Huszak István egyetemi
tanár) közleménye.

4

CA

The voltage balance of an electrolyzer. V. P. Masbovets
and G. V. Fursbun. *Zhur. Priklad. Khim.* [J. Applied
Chem.] 22, 1182 (1949). - The conventional procedure of
averaging the potential of an electrode and assuming an av.
ohmic drop across the electrolyte is meaningless if the
field between the electrodes is nonhomogeneous. The-
oretically and experimentally it is possible to have a field dis-
tribution in which certain points of layers of the electrolyte
lying at the anode are at a lower potential than some points
close to the cathode. N. Thon

✓ Influence of the Geometric Parameters of the Electrolytic Cell on the Distribution of Potential and Current on the Electrode Surface, G. V. Forsblom and V. P. Mashovets (Trudy Sovetskoye Khimii 1950, 1953, 431-441). —[In Russian]. Various experiments were made, using acid CuSO₄ baths. The effective electrode potential, calculated for the mean c.d., depends on the geometry of the cell. The ohmic resistance of the electrolyte depends not only on the geometry and the resistivity of the electrolyte, but also on the polarizability of the electrode and the current strength, so that the conception of a "cell const." is meaningless. The same is true of the idea of "throwing power". —G. V. E. T. ①

FORSBLUM, G

V

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668.461
.M3

Elektroloticheskoye Proizvodstvo Alyuminiya (Electrolytic Production of
Aluminum, by) V. P. Mashovets i G. V. Forsblom. Moskva, Metallurgizdat, 1951.
220 p. Illus., Diagr., Tables.

AB-520529

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(2)
Role of geometric factors in the so-called "throwing power" of electroplating baths. V. P. Afashovets and P. V. Forsblom (*J. appl. Chem., USSR*, 1952, 25, 532-542).—It is maintained that the throwing power, as determined in Haring and Blum's cell, is not independent of the dimensions of the electroplating bath. By a mathematical analysis, which considers electrode polarisabilities, inter-electrode spacing, mutual disposition of anode and cathode, electrolyte conductance, and current strength and c.d., it is demonstrated that predictions of throwing power may be very wrong.
R. C. MURRAY.

Metallurgical Abst.
June 1954
Electrodeposition

3 4
/ *The Role of Geometrical Factors in the So-Called "Dispersibility" of Galvanic Baths. V. P. Maslovets and G. V. Korablom (Zhur. Priklad. Khim., 1952, 25, (8), 632-643 (in Russian); J. Appl. Chem. U.S.S.R., 1952, 25, (5), 597-609 (in English)).—According to Lainer and Kudryavtsev ("Fundamentals of Electroplating", Moscow: 1943), the dispersibility of the bath is the divergence of the distribution of the metal from the fundamental distribution of current, thus indicating the possibility of obtaining a uniform deposit on a profiled cathode without the use of contoured anodes, screens, &c. M. and F. propose analytical expressions enabling the effect on the dispersibility of variations in the polarizing powers of the electrodes, the sp. elect. conductivity of the electrolyte, the current strength, and the distance between the electrodes to be determined. By graphical construction of the elect. fields in various baths, it has been shown that a given variation in any one factor may lead to either more or less uniform distribution of the current on the cathode, depending on the geometrical parameters of the bath.—G. V. E. T.

FORSBLOM, G. V.

Evaluation of voltage drop in aluminum cells. G. V.

Forsblom and V. P. Mashovets (All-Union Aluminum-Magnesium Inst., Leningrad), Zhur. Priklad. Khim. 25,

1165-76(1952); cf. C.A. 44, 4802c.—The ohmic voltage drop ΔV in a cryolite- Al_2O_3 bath with Al and graphite electrodes was detd. analytically as a function of parameters obtained either from a plot of the elec. field or from the dimensions of the electrodes, length A and width B ($P = 2(A + B)$) and the interelectrode distance L . At first it was assumed that the entire polarization effect was due to that of the graphite electrode. Then 3 fields of this electrode were plotted: no assumed polarization; polarization assumed according to the e.d. vs. η data of Karpacheva, *et al.* (C.A. 43, 6519e) and according to similar data of de-Kay Thompson, *et al.* (C.A. 27, 4483). The analysis of these fields led to the conclusion that the effect of polarization on ΔV was negligible and the equation was reduced to

$$\Delta V = (I\rho/N) \sum_{i=1}^N m_i = 1.56 \text{ which was considered in}$$

satisfactory agreement with exptl. data ($I = iN$, i the elec. power of each "tube" of force, N the no. of tubes in the entire vol., m the no. of elements of vol. in each tube, and ρ the specific resistance of the electrolyte). A simpler equation which could be solved without plotting the electrode field was obtained: From previously published data (C.A. 46, 10962g) it was shown that the effect of the distance C between the walls and the edges of the electrodes was negligible for $C \geq 5L$. It was also shown that for L between 3 and 10 cm. the no. of tubes as a function of L was practically linear. Within these limits of C and L the equation was $\Delta V = I\rho L/[AB + P(L + 2.5)]$. Over a wide range of the parameters the calcd. values agreed satisfactorily with exptl. data.

I. Benicovitz

1. MASHOVETS, V. P.: FORSBLOM, G. V.
2. USSR (600)
4. Electric Currents
7. Distribution of a direct current electric field in electrolyzers. Zhur: fiz. khim. 26 no. 10, 1952.

9.8 Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified!

3

U S S R .

.. The dependence of the electrochemical and ohmic fall of potential upon the geometry in an electrolytic cell. G. V. Forsblom and V. P. Mashovets. *J. Appl. Chem. U.S.S.R.* 26, 947-8 (1953) (Engl. translation).—See C.A.B. 48, 5688c.
H. L. H.

CPA 7-1000484

The dependence of the electrochemical and ohmic fall of potential upon the geometry in an electrolytic cell. G. V. Porabon and V. P. Maslovets. *Zhur. Priklad. Khim.* 26, 1627 (1953).—The effective potential of an electrode was dependent upon local c. ds. which were detd. by cell geometry. In regions of low c.d., the electrode potential usually diminished faster than linearly with a decrease of c.d. Therefore the effective potential was lowered as current distribution became nonhomogeneous. The change in potential was illustrated for 2 electrolytic cells differing only in the shape of the anode. A graphical method of field construction was used (C.A. 47, 9325c). Potential and current distribution patterns were shown for a cell with two parallel plate electrodes (presumably Cu) 300 mm. long, sep'd. by a distance, l , where $l = 50$ or 100 mm. One electrode was displaced 100 mm. relative to the other. The technique permitted calcn. of cell consts. as used in cond. measurements (C.A. 44, 4802e). Cell consts., C , were measured for a soln. contg. 50 g./l. of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ and 3 solns. of the same concn. of CuSO_4 contg. H_2SO_4 . At $l = C = 2.05$ for the CuSO_4 soln.; 2.32 for a soln. contg. 20 g./l.; 2.33 for a soln. contg. 50 g./l.; and 2.09 for a soln. contg. 350 g./l. At $l = 50$ mm., with a.c., $C = 1.33$ for all 4 solns.; with d.c. (45 ma.), $C = 1.33$ for the CuSO_4 soln.; 1.40 for the soln. contg. 20 g./l.; 1.60 for the soln. contg. 50 g./l.; and 1.86 for a soln. contg. 350 g./l. With the soln. contg. 50 g./l. and $l = 50$ m.m. the values of C at 15 and 90 ma. d.c. were 1.68 and 1.40, resp. The increase of C in the d.-c. measurements with higher H_2SO_4 concns. resulted from longer current lines and must be ascribed to greater polarization since the cond. increased. Current distribution must be uniform to obtain reproducible electrolytic cell data, especially in good conductors such as fused salts. For this reason, "cell consts." derived from a.-c. data were inadmissible for use in d.-c. electrolysis.

R. D. Mi

All-Union Aluminum-Magnesium Inst.

FORSBLOM, G.V.

Distribution of the electric field of direct current in electrolyzers.
A graphical method of field construction. Zhur. Fiz. Khim. 27, 321-9 '53.
(CA 47 no.19:9825 '53) (MLRA 6:5)

1. All-Union Inst. Aluminum and Magnesium, Leningrad.

U S S R .

The conditions of modeling the electrical field of electrolyzers. G. V. Forsblom and V. P. Mashovets. *Doklady Akad. Nauk S.S.S.R.* 91, 593-5 (1953).—For the feasibility of modeling, the varying parts of the polarization equation, i.e., the dependence of the electrode potentials on c.d. of the corresponding anodes and cathodes of the model and of the real field, must be expressed as curves of the same family. In many cases the desire for an accurate quant. soln. must be compromised with semiquant. or even qual. results. In some practical problems, a model may be built to reproduce sufficiently accurately the real field. Such cases include those in which one electrode, polarized more weakly than the other, may be considered unpolarizable, and also those cases in which the electrode potentials depend linearly on the c.d. The former cases are very commonly observed on electrolysis of fused salts. The latter are often observed with intermediate and high c.d.'s in diverse electrode-electrolyte combinations. E. M. Eikin

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G. V. F. A. S. D. L. M.

Distribution of the electric field of direct-current cells.
V. P. Mashovets and G. V. Forsblom. Zhur. Priklad.
Khim. 27, 280-97(1954); Cf. C.A. 47, 7919h.—To con-
 firm experimentally the differential equations and conclu-
 sions derived analytically and previously reported, the equi-
 potential lines of a rectangular electrolyzer were detd. over
 a wide range of c.d., polarizing power of the electrodes
 (Cu, Pb), and the sp. cond. χ of the electrolyte. Elec-
 trodes of identical dimensions and parallel to each other
 were offset so that only a part of each was opposite the
 other, thus distorting the field. The electrolytic contact
 was so mounted that it could be moved normal and parallel
 to the electrodes. The potentiometer was set at presdtd.
 p. ds. ΔU and the contact moved over the cell until the zero
 point was reached and recorded. At the end of the expt.
 the entire cell was plotted with equipotential lines. The
 current lines, normal to the equipotential lines and forming
 angle θ with the electrode, were drawn with a divider so that
 the distance between them was equal to that between the
 equipotential lines. The no. of spaces, "tubes of force,"
 between the current lines, n , in the field and their current
 force, i , entered in all subsequent calcs.: $\chi = I/1.5n\Delta U$,
 where $I = in$, (1.5 cm. = the electrolytic depth in the cell).
 The calcd. and exptl. values of χ agreed within $\pm 5\%$.
 Curves of c.d. vs. λ yielded the values of $d\lambda/dj$, the polarizing
 power of the electrodes, and those of c.d. vs. λ gave $dj/d\lambda$;
 j = the c.d. over the electrode and λ the distance in cm. of a
 given point from the edge (left) of the electrode. The
 calcd. value of $\tan \theta = -j/\chi(d\lambda/dj)(dj/d\lambda)$ agreed satis-
 factorily with the exptl. values, considering the difficulties
 of obtaining the several values from plots. Addtl. con-
 clusions made previously (loc. cit. and C.A. 48, 6885i) were
 corroborated.
 I. Bencowitz

[Handwritten signature]
 12/15/54

FORSELOM, G.V.

Effect of electromagnetic fields on the performance of aluminum
electrolyzers. TSvet.met.29 no.3:63-72 Mr '56. (MIRA 9:7)

1.Vsesoyuznyy alyuminiyovo-magniyevyy institut.
(Aluminum--Electrometallurgy)

Control of the process of electrolysis of cerium-aluminum

577

7-2

AUTHOR: Niderkorn, I.

136-2-17/22

TITLE: Notes on the Article of G.V. Forsblom and R.A. Sandler
"CO₂ Content of Anodic Gases as a Method for Controlling
the Process of the Electrolysis of Cryolite-Alumina Melts."
(Zamechaniya k stat'ye G.V. Forsbloma i R.A. Sandlera "Soder-
zhaniye CO₂ v anodnykh gazakh kak metod kontrolya protsessa
elektroliza kriolit-glinozemnykh rasplavov)

PERIODICAL: Tsvetnyye Metally, 1957, No.2, pp. 83 - 84 (USSR)

ABSTRACT: In Tsvetnyye Metally 1956, No.6, Forsblom and Sandler
suggested that electrolysis in aluminium-producing electro-
lyzers could be controlled from CO₂ - determinations in the
anode gases. The present author rejects their views on the
mechanism of CO - formation from CO₂ and on the effects of
current density, alumina concentration and other factors on
anode-gas analysis.
There are 5 Slavic references.

ASSOCIATION: Nintsvetmetzoloto.

AVAILABLE: Library of Congress

SOV/137-58-9-18798

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 92 (USSR)

AUTHORS: Strelets, Kh.L., Voynitskiy, A.I., Ivanov, A.I., Petrov, V.I.,
Sergeyev, V.V., Forsblom, G.V.

TITLE: Studies in the Metallurgy of Titanium (Raboty v oblasti metallurgii titana)

PERIODICAL: V sb.: Legkiye metally. Nr 4. Leningrad, 1957, pp 114-120

ABSTRACT: A review of studies of titanium metallurgy in the USSR comprising the production of anhydrous TiCl_4 , the development of processes and equipment for reduction of TiCl_4 by Mg and Na, the purification of Ti sponge, the electrolysis of Ti and TiO_2 chlorides, the electrolytic refining of Ti, etc. The studies and investigations performed have made it possible to organize large-scale industrial extraction of Ti in the USSR.

Yc.Z.

1. Metallurgy--USSR 2. Titanium--Study and teaching

Card 1/1

SOV/136-58-9-9/21

AUTHORS: Forsblom, G.V. and Goldelenok, Ye. G.

TITLE: Study of the Wetting Effects in the Magnesium-Thermic Reduction of Titanium (Izucheniye yavleniy smachivaniya v protsesse magniyetermicheskogo vosstanovleniya titana)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 9, pp 43-47 (USSR)

ABSTRACT: The authors give the results of their work, which they claim is the first attempt in this field, on the wetting of various materials by liquid magnesium chloride. The work was confined to the more qualitative aspects and employed a modification of the 'sitting drop' method (Refs. 1,2,3) in which the measurements could be carried out in a vacuum or a controlled atmosphere (figs 1 and 2). The image of the drop was projected onto a screen, traced and examined, the drop temperature being measured into a chromel-alumel couple and recorded on a type EPD-12 electronic potentiometer. The argon used was purified by passing over hot copper and titanium and over anhydrous calcium chloride. It was found that at 650-900°C in argon type St.3 steel is not wetted by magnesium, nor is titanium (0.5% C, 0.13% Fe, 0.06% Si, 0.03% N) at

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Study of the Wetting Effects in the Magnesium-Thermic Reduction of
Titanium SOV/136-58-9-9/21

650-850°C. Both materials were wetted by magnesium if they were covered by a layer of magnesium chloride. The spreading of magnesium over a titanium surface was prevented by adding titanium tetrachloride to the argon even in very small concentrations; with a steel plate this effect was obtained with concentrations of 0.0065-0.0108 but not of 0.001-0.0032 g/cm³. Liquid magnesium chloride was found to wet titanium more than steel. A special container was used to study the wetting of liquid magnesium by magnesium chloride in argon and argon with 0.01-0.015 g/cm³ of titanium tetrachloride; with the latter reaction took place between the magnesium and tetrachloride forming an appreciable quantity of sponge, with the former wetting began as soon as the chloride had melted.

There are 4 figures and 3 references (Soviet)
ASSOCIATION: VAMI 1. Titanium--Reduction 2. Wetting agents--Test results
Card 2/2 3. Magnesium alloys--Performance 4. Argon--Applications

SOV/136-59-1-13/24

AUTHORS: Arkad'yev, A.G., P'yankov, V.A., Strelets, Kh.L. and Forsblom, G.V.

TITLE: Development of a System for Automatic Control of the Magnesium-Thermic Titanium Reduction Process (Razrabotka skhemy avtomaticheskogo regulirovaniya protsessa magniytermicheskogo vosstanovleniya titana)

PERIODICAL: Tsvetnyye Metally, 1959, Nr 1, pp 53-62 (USSR)

ABSTRACT: The authors describe the titanium production process in which the tetrachloride reacts exothermically with magnesium at a temperature of 850-900°C and over. They suggest that control of this process requires control of tetrachloride feed and reaction-vessel cooling, of charging of magnesium and discharging of magnesium chloride and of non-reactive zone heating. They describe work on the possible automation of the process; Engineers L.B. Kuzelyuk, N.A. Plakhotnikova, I.B. L'vin and R.A. Sandler participated. Studies of temperature distribution in reaction vessels showed that temperatures at a given level were uniform within 15-20°C (except at the start), but the level of maximal temperature shifts during the process (Fig 2 shows temperature vs time

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SOV/136-59-1-13/24

Development of a System for Automatic Control of the Magnesium-Thermic Titanium Reduction Process

curves for levels 1-5 (in ascending order of height) against time (hours)). From an examination of the requirements for automation they conclude that the system should be based mainly on keeping the process at the maximal temperature and mention that a suitable device has been described (Ref 2). The authors outline the system they have developed. In this (Fig 3), PSR1 potentiometers, connected to the appropriate junctions of multiple-junction thermocouples, control the heating of the upper and lower parts of the reaction vessel; the middle-zone temperature is measured by an EPP-120-2S potentiometer to which the maximal-temperature finder automatically connects the highest-temperature junction of those in that zone; during the heating the zone-temperature is controlled by a contact on the potentiometer, operating, through a type IR-130 controller and a type IM-2/120 actuating mechanism, the regulating valve for the tetrachloride flow; this flow is also controlled by the pressure in the vessel (the manometer being

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Development of a System for Automatic Control of the Magnesium-
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provided with a DSR 1 secondary instrument with contacts), manually, or remotely by a transducer PDI and a secondary device EPID-05 with an integrator; a computer provides, depending on signals from the integrator for the appropriate influxes of tetrachloride, the tapping of magnesium chloride and magnesium addition and the ending of the process. The authors give descriptions of the circuits (Fig 4), the ITM-205 maximal-temperature finder (made by the KB TsMA) and the multiple-junction couples it requires, the control valve and the flow transducer type PDI (Fig 5). They outline tests on a pilot-plant scale installation which showed that the temperature control (Fig 6) was better than with manual regulation (Fig 7) and that better-quality processes with higher

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SOV/136-59-1-13/24
Development of a System for Automatic Control of the Magnesium-
Thermic Titanium Reduction Process

productivities were obtained with automation (Table).
They state that the automatic system has functioned well
in full-scale tests.
There are 6 figures, 1 table and 4 Soviet references.

Card 4/4

SOV/136-59-4-10/24

AUTHORS: Arkad'yev, A.G., Baldovskiy, L.A. and Forsblom, G.V.

TITLE: Methods of Measuring the Parameters of an Aluminium Electrolyser (Metody izmereniya parametrov alyuminiyevogo elektrolizera)

PERIODICAL: Tsvetnyye metally, 1959, Nr 4, pp 49-56 (USSR)

ABSTRACT: In 1950-1955 the Tsentral'naya laboratoriya avtomatiki (Central automation laboratory) of the Ministerstvo chernoy metallurgii SSSR (Ministry of Ferrous Metallurgy of the USSR) and the Vsesoyuznyy alyuminiyevo-magniyevyy institut (All-Union Aluminium-Magnesium Institute) carried out work on the automatic measurement and control of aluminium-electrolyser parameters. The work was carried out at the Volkhovskiy (Volkhov) and mainly at the Ural'skiy (Ural) aluminium works. In addition to the authors the following participated: N.L.Zenov, T.A.Ivanets, , V.A.Kukhtin and A.T.Mamontov (Ural Works) V.I.Gruzin (TsLA), R.A.Sandler, Ye.I.Glaz and others (VAMI). One of the main objects of the work was on the inter-polar distance parameters, for dealing with which existing methods are inadequate. The first stage was the development of a method for measuring the resistance of

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SOV/136-59-4-10/24

Methods of Measuring the Parameters of an Aluminium Electrolyser

the electrolyte in the inter-polar space and for the determination of the potential of the sole of the anode and the surface of the metal. For the latter suitably arranged uninsulated probes were used (Fig 1); the potentials measured thereby were not exactly equal to the values on the anode sole and metal surface but were sufficiently so for practical purposes (table 1 shows the values and errors). For measuring the electrolytic resistance in the inter-polar space a resistance meter developed at the TsLA was used (Fig 2). This is based on an automatic electronic potentiometer (types BP-102 and EPP-09 were used) and gave results correct to $\pm 1.5\%$ for most of the operating period (table 2) and for six months has been successfully used at the UAZ to regulate ten electrolyzers, reducing power consumption by 1.5%. The authors outline the theory of the device. They go on to show how it can be used, together with a device for measuring anode movement, for measuring the electrical conductivity of the electrolyte

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Methods of Measuring the Parameters of an Aluminium Electrolyser

and the interpolar distance. The arrangement shown in Fig 3, has the disadvantage that, if used for control purposes, it requires a complicated apparatus. The authors therefore developed a variant (Fig 4) containing additionally a relay and contact group and a transmitting potentiometer mechanically linked with the pointer of the anode-movement measuring device. Tests and calculations have shown that this arrangement gives the conductivity and the inter-polar distance with errors of under ± 4 and $\pm 9\%$ respectively. In a six month test on ten electrolyzers at the UAZ, with automatic control through inter-polar distance, a 1% reduction in power consumption was obtained. The mean values of electrolyte conductivity and the back emf of production electrolyzers ($1.48 \text{ ohm}^{-1} \text{ cm}^{-1}$ and 1.45 V respectively) differ from previously accepted values. There are 4 figures, 2 tables and 2 Soviet references.

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S/136/60/000/010/004/010
E071/E333

AUTHORS: Forsblom, G.V. and Sandler, R.A.

TITLE: The Influence of Some Technological Parameters on
the Indices of the Process of Magnesium Thermal
Reduction of Titanium Tetrachloride ✓

PERIODICAL: Tsvetnyye metally, 1960, No. 10, pp. 62 - 67

TEXT: The results of a laboratory investigation on the
influence of temperature, rate of feed of titanium tetra-
chloride (expressed in g/cm^2 of the cross-sectional area
of the reaction vessel, per hour) and partial pressure of
argon in the reaction vessel, are reported. The experiments
were carried out in a reactor (shown in Fig. 1), in two types
of a reaction vessel: a screened (broken lines in Fig. 1) and
an open vessel. As a reducing agent, a standard magnesium
in ingots was used. The ingot was preliminarily annealed in
a furnace and then cleaned with wire brushes until the metal
was shining. The total charge of magnesium amounted to
400 g. Temperatures and pressure in the reaction vessel were
recorded. In experiments on the determination of the maximum

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EO71/E333

The Influence of Some Technological Parameters on the Indices
of the Process of Magnesium Thermal Reduction of Titanium
Tetrachloride

possible coefficient of utilisation of magnesium, the reduction process was stopped as soon as there was a sharp and stable increase of the pressure inside the reactor. In other experiments the process was stopped when a given and constant quantity of Mg was used up. Depending on the rate of feeding TiCl_4 a given constant temperature in the reactor was maintained ✓

either by the furnace or by cooling with air in the furnace. For feed rates above 50-60 g/cm² the reactor was placed outside the furnace and water-cooled. The influence of the feeding rate of titanium tetrachloride on the yield of the sponge and the degree of utilisation of magnesium (at 850 °C) is shown in Fig. 2 (top for screened and bottom for unscreened reaction vessel). With the screened vessel the feed rate of titanium tetrachloride has no influence on the yield of sponge which amounted to 97-99%; with the unscreened vessel such a yield can be obtained only at moderate velocities. The influence of the feeding rate on the degree of utilisation of magnesium in the screened reaction vessel at temperatures of 850, 920 and 1000 °C is shown in Fig. 3. The dependence of the yield of sponge on the
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The Influence of Some Technological Parameters on the Indices
of the Process of Magnesium Thermal Reduction of Titanium
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coefficient of utilisation of magnesium (Fig. 4) indicates that a decrease in the yield begins at 68-70% utilisation of magnesium. Thus, in order to obtain a high yield of sponge the process should be stopped before a stable increase in pressure occurs. The influence of the rate of feed on the yield of fine fractions of sponge at the above temperatures is shown in Fig. 5. With increasing temperature the influence of the feeding rate decreases. Sponge produced at high feeding rates of TiCl_4 is more porous, more branched and can be removed more easily from the reaction vessel. The influence of the partial pressure of inert gas (argon) on the reduction process is shown in Fig. 6. Increasing pressure of the inert gas decreases the yield of sponge and the coefficient of utilisation of magnesium and increases the proportion of fine fractions in the sponge produced. The negative influence of increasing pressure of argon is explained by the formation of a larger proportion of lower titanium chlorides.

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At an argon pressure below 0.2 - 0.3 atm. abs., the formation of lower titanium chlorides was not observed. An increase in the partial pressure of argon is accompanied with an increase in the iron content in the sponge, e.g. at a pressure of 0.16 - 0.18 atm. abs., the iron content was 0.98% and at 2.85 - 3.0 atm. abs., the iron content increased to 4.6% (more data are given in the text). The influence of the feeding rate of $TiCl_4$ on the content

of iron and chlorine in the sponge produced is shown in Fig. 7. With a decreasing feeding rate, the content of the above elements increases. It is concluded that:

- 1) an increase in the partial pressure of inert gas during the reduction process decreases the utilisation of titanium tetrachloride, promotes the formation of lower chlorides, increases the content of iron in sponge;
- 2) an increase in the feeding rate of titanium tetrachloride into the reactor decreases the content of iron and chlorine in

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EO71/E333

The Influence of Some Technological Parameters on the Indices
of the Process of Magnesium Thermal Reduction of Titanium
Tetrachloride

the sponge produced and does not produce any practical
deterioration in other indices of the process.
3) the necessity of insulating the reaction space from cold
zones of the reactor (if such are present) was confirmed. In the case
of a sufficiently tight insulation of the reaction space the
yield of sponge is mainly determined by the coefficient of
utilisation of the magnesium. There are 7 figures.

ASSOCIATION: VAMI

Card 5/5

FORSBLOM, G.V.; ARAKELYAN, O.I., KUZNETSOVA, Ye.I.; GOLDELENOK, Ye.G.

Studying the structure of titanium sponge. TSvet. met. 33 no.8:50-51
Ag '60. (MIRA 13:8)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Titanium--Metallography)

FORSBLOM, G.V.; SANDLER, R.A.

Effect of certain technological parameters on the indices of the
magnesiothermic process for the reduction of titanium tetrachloride.
TSvet. met. 33 no.10:62-67 O '60. (MIRA 13:10)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Titanium chloride) (Titanium--Metallurgy)

MASHOVETS, V.P.; FORSBLOM, G.V. Prinsipal uchastiye POPOV, R.B.;
GULYANITSKIY, B.S., inzh., retsenzent; FIRSANOVA, L.A.,
red.; ATTOPOVICH, M.K., tekhn. red.

[Electrolytic production of aluminum] Elektroliticheskoe
proizvodstvo aluminia; prakticheskoe rukovodstvo dlia
rabochikh, brigadirov i masterov tsekhov elektroliza aliu-
minevykh zavodov. Moskva, Metallurgizdat, 1951. 220 p.
(MIRA 16:7)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut (for
Mashovets, Forsblom).

(Aluminum--Electrometallurgy)

"Scientific base of the process of fulling."

Industria Textile, Bucuresti, Vol 5, No 5, May 1954, p. 197

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

YUGOSLAVIA / Virology. Human and Animal Viruses.

E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43066.

Author : Zeljko, M., Forsek, Z.

Inst : Not given.

Title : Experimental and Practical Checking of a Modified Hog Cholera Virus Obtained from Hogs.

Orig Pub: Veterin. arh., 1956, 26, No 9-10, 237-253.

Abstract: A modified virus (M-virus) was obtained from lap-inized (?) hog cholera virus additionally passed once through piglets of 25-30 kg. As vaccine we used defibrinated blood of a hog variety (weight 25-30 kg) sensitive to virus, taken on the 6-7 day after infection at a temperature not lower than 39.5°, or lyophilized material composed of a 10% spleen suspension in undiluted defibrinated blood. In the defibrinated blood at a temperature from -2° to -4° the virus was preserved for a period of 4-5

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5

YUGOSLAVIA / Virology. Human and Animal Viruses.

E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43066.

Abstract: months, at room temperature for 18 days; in lyophilized material at -4° for a period of 8 months. The virus was administered together with 5-10 ml of serum depending on the weight and condition of the animal. When 10 ml of hyperimmune serume was administered, no post-vaccination reactions were observed. Data are given of virus titration on hogs, in solutions of 1:50, 1:100, and 1:150 given either with or without the serum. The pathogenic potential of M-virus was low. In the district of Voyvodin, when 1,062,099 hogs were vaccinated, during a 3-week period after vaccination reactions were observed in 0.16%; 0.05% of the animals died. Immunity failure was noted in very young animals or when improper vaccine was used.

Card 2/2

YUGOSLAVIA/Diseases of Farm Animals - Diseases Caused by
Viruses and Rickettsiae.

R-3

Abs Jour : Ref Zhur - Biol., No 14, 1958, 64669

Author : Forsek, Z., Zeljko, M., Kurtanjek, I.

Inst : -

Title : Immunization of Chickens Against the Newcastle Disease by
Means of the Addition of the Virus of the Newcastle Disease to Drinking Water with a Stabilizer.

Orig Pub : Veterinaria (Jugosl.), 1957, 6, No 1, 4-12.

Abstract : The best vaccine for the immunization of chickens according to this method was found to be the glycerinated virus of the Muktesvar strain, and the best stabilizer, powdered milk. The amount of virus necessary for immunization was about 15 thous. units DL_{50} per 1 ml. The titer of the retardation of agglutination in the vaccinated chickens averaged about 1:250 and the number of chickens that had not acquired immunity did not exceed 4%. Bacterial

Card 1/2

YUGOSLAVIA/Microbiology - Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria.

F

Abs Jour : Ref Zhur Biol., No 22, 1958, 99503

Author : Forsek, Z., Tunkl, D., Romic, Z.

Inst : -

Title : Testing of Bovine Tuberculin on Artificially Sensitized
Cattle. I. Sensitization of Cattle with Killed Tubercle
Bacteria

Orig Pub : Veterinaria (Jugosl.), 1957, 6, No 4, 55

Abstract : No abstract.

Card 1/1

YUGOSLAVIA

Z. FORSEK, Institute for Scientific Research and Diagnosis of Veterinary
Faculty (Naučno-istraživački i dijagnostički institut Veterinarskog
fakulteta) Sarajevo.

"Plans, Experiences and Methods of Control of Hog Cholera in Some Other
European Countries and in Yugoslavia."

Belgrade, Veterinarski Glasnik, Vol 17, No 4, 1963; pp 345-349.

Abstract : A general review of the epidemiologic conditions and measures
as carried out to control hog cholera in France, England, Germany and
Yugoslavia. Four Western and 5 Yugoslav references.

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FORSEK, Z.
SUMMARY (in caps); Given Names

Country: Yugoslavia

Academic Degree: [not given]

Affiliation: Center for Infectious Diseases and Microbiology of
the Faculty of Veterinary Medicine (Zavod za zaraze i
mikrobiologiju Veterinarskog fakulteta) Sarajevo

Source: Belgrade, Veterinarski glasnik, No 5, 1961, pp 365-367.

Data: "Epizootiology of Psittacosis."

Authors:

FORSEK, Z.

MATUKA, S. ✓

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YUGOSLAVIA

NEVJESTIĆ, A., Dr., Assistant, RUKAVINA, Lj, Dr., Assistant, FORŠEK, Z.,
Dr., Professor; Scientific Research and Diagnostic Institute, Faculty of
Veterinary Sciences, Sarajevo

"Qualitative and Quantitative Colorimeter Amylase Test of Pancreatic
Tissue in Diagnostics of Hog Cholera"

Belgrade, Veterinarski Glasnik, Vol 20, No 9, 1966, pp 647-652

Abstract: Using qualitative (Taylor test) and quantitative amylase tests the authors carried out examination of pancreas of pigs which died after natural infection by hog cholera virus. In the group of pigs without secondary bacterial infection, the qualitative and quantitative tests were 76.38% and 62.50% positive, respectively. With pigs exhibiting also secondary bacterial infection, the results were 60.00% and 63.33%, respectively. Finally, in pigs which were infected by *E. rhytiopathiae* or *Salmonella* only, the positive tests results were 7.69% and 15.38%. This, together with the fact that the numbers for healthy pigs are 2.50% and 2.00%, seems to indicate that Taylor's test, though not completely specific, can be used for the diagnosis of hog cholera. There are 7 Yugoslav, 7 Soviet, and 2 Western references.
(Manuscript received, 13 Jun 66.)

1/1

FURSH, B. N.										137 AND 138 000001										PROCESSES AND PROPERTIES MORE										139 AND 140 000001									
<p style="text-align: center;"> Method of compression of results of hydro- chemical analysis. B. N. Fursh (Dokl. Akad. Sci. U.S.S.R., 1958, 7, 686-688). — A discussion. </p> <p style="text-align: right;">B. T.</p>										A-1																													
430-354 METALLURGICAL LITERATURE CLASSIFICATION										13000 000000										13000 000000										13000 000000									
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1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
FORSH, R. N.																									
PROCESSES AND PROPERTIES INDEX																									
<p>Geochemical composition of ocean and continental water (from Bafra). D. N. FORSH. <u>Compt. rend. Acad. Sci. U.R.S.S.</u>, 1936, 4, 145.</p> <p>(46). The concn. (c_0) of C, N, O, Na, Mg, Al, Si, P, S, Cl, K, and Ca has been determined at the reservoir at Bafra, and has been compared with the concn. in the ocean (c_1). $\log c_0/c_1$ when plotted against group no. in the periodic table gives a graph with a max. at group IV, groups I and VII giving the lowest val.</p> <p>R. S. B.</p>																									
<p>COMMON ELEMENTS</p> <p>COMMON VARIABLES</p> <p>COMMON MODELS</p> <p>COMMON VARIABLES</p>																									
<p>ASM-51A METALLURGICAL LITERATURE CLASSIFICATION</p> <p>COMMON MODELS</p> <p>COMMON VARIABLES</p>																									

FORSH, B.N.										PROCESSING AND PROPERTIES INDEX									
<p>Field of thermal water. B. N. Forsh (Compt. rend. Acad. Sci. U.S.S.R., 1966, 4, 196-198).—On the assumption that thermal H₂O is saturated with CaCO₃ at a certain stage in its metamorphism, the expression $ab = 2 \times 10^4 (C_2 L / N_2 K_2) = \text{const.}$ is derived (a = alkalinity, b = hardness of the H₂O; L = solubility product and N₂ = normality of CaCO₃; K₂ = second dissociation const. of H₂CO₃). This yields a family of hyperbolas, in agreement with the data from 20 springs in the Badkai region, in which the limits for ab are 200 and 50 (mean 100). R. C. M.</p>										<p>21</p>									
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION										E-2									
SOURCE SYNDICATE										SOURCE SYNDICATE									
SYNDICATE										SYNDICATE									

Mr. Alex.

FORSH, B.N.

AI-11, 1000, 1000

Fundamental parameter of salt discharge for a clear river bed. *B. N. Fortsch*
(Compt. rend. Acad. Sci. U. R. S. S., 1941, 32, 279-281). *W. R. A.*

Baykal Limnology Station, Acad Sci. USSR.

CA

BASIC PARAMETERS OF SALT FLOW IN OPEN CHANNELS N. N.

Forth. Doklady Akad. Nauk S.S.S.R. 68, 425 R(1970)
Empirical dependence of salt concn. on the rate of water flow in river channels may be given by $c = AQ^n$, where c is salt concn., Q is the water expenditure (or flow), and A and n are parameters. At value of Q set at unity and considering the solubilities of CaCO_3 , MgCO_3 , CaSO_4 , and all Na salts and chlorides, one may expect the contents of the river waters to be in correspondence with: $\text{Na} < \text{Mg} < \text{Ca}$; $\text{Cl} < \text{SO}_4 < \text{HCO}_3$. Actually reverse results are encountered because of the variations in the availability of the elements (or ions) in the supplying terrain. Caled. values of n for several Russian rivers are given. The various structural and flow factors which affect the parameters are discussed.
G. M. Kosolapoff

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SHOW POLITY

FORSH, B.N.

Salinity of stream water; results of a theoretical analysis. Trudy
Baik.limnol.sta. 14:7-102 '54. (MIRA 3:5)
(Baikal region--Water--Analysis) (Salinity)

FORSH, L.F.

Evaporation from the Lake Baikal Ice Surface in the Winters of 1942 to 1945.

Dok. Akad. Nauk, 66 (1949), 2, 195-198.

Lab. Lake Studies, Dept. Geol.-Geog. Sci, Acad. Sci. USSR

SO: Translation Sup.-2524467, 30 Dec 1954.

~~FORSH, L.E.~~

Reflection of solar radiation from lake surfaces. Trudy Lab.
overed. 3:3-22 '54. (MLRA 8:2)
(Solar radiation)(Lakes)

~~FORSH, L.F.~~

~~Characteristics of the surface temperatures of Lake Baikal. Trudy~~
Baik. limnol. sta. 15:95-158 '57. (MLBA 10:8)
(Baikal, Lake--Temperature)

FORSY, L.F.

Vertical distribution of meteorological elements over the surface
of waters. Trudy lab. overoved. 8:256-277 '59. (MIRA 13:2).
(Hydrometeorology)

FORSH, L.F.

Evaporation from the water surface of small reservoirs in Kurgan Province and some dynamic features of their water masses.

Trudy Lab. ozeroved. 13:22-55 '61. (MIRA 14:10)

(Dorshchen Reservoir--Hydrometeorology)

(Berezovyy Reservoir--Hydrometeorology)

FORSH, L.F.

Rate of silt thickness in the formation of the thermal regime of
Lake Velikoye. Izv. Vses. geog. ob-va 97 no.4:358-364 J1-Ag '65.
(MIRA 18:8)

FORSK., Nikolay Nikolayevich; POZNER, V.M., redaktor; PERMINOV, S.V., redaktor; GENNAD'YEVA, I.M., tekhnicheskiiy redaktor.

[Permian deposits; Ufa series and the Kazanian stage] Permskie otlozheniya; ufimskaya svita i kazanskiy iarus. Leningrad, Gos. nauchno-tekhn. izd-vo neftyanoi i gorno-toplivnoi lit-ry, 1955. 156 p. (Leningrad. Vsesoiuznyi neftyanoi nauchno-issledovatel'skii geologo-razvedochnyi institut. Trudy no. 92). (MLRA 9:5)
(Geology, Stratigraphic)

USSR/ Geology - Paleontology

Card 1/1 Pub. 22 - 34/49

Authors : Kara-Murza, E. N.; Kolyadnyy, S. N.; and Forsh, N. N.

Title : The flora from the red-colored stratum of the Chaleken peninsula

Periodical : Dok. AN SSSR 102/1, 137-139, May 1, 1955

Abstract : Geological data are presented on the flora from the red colored strata of the Chaleken peninsula in western Turkmen-SSR.

Institution : All-Union Petroleum Sc. Res. Geol. Explor. Inst.

Presented by : Academician D. V. Malivkin, January 3, 1955

FORSH, N.N.

Method for correlating red beds in western Turkmenia. Avtoref. nauch.
trud. VNIGRI no.17:252-257 '56. (MIRA 11:6)

(Turkmenistan--Rocks, Sedimentary)

FORSH, M.N.; KOLYADNYY, S.N.

Correlation of red-colored deposits of the Neogene in Turkmenistan.
Geol. nefti 1 no.2:30-32 P '57. (MLBA 10:8)
(Turkmenistan--Geology, Stratigraphic)

FORN, HAN

3(5);15(5)

PHASE I BOOK EXPLOITATION

SOV/1385

Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut

Geologicheskii sbornik, 3 (Collection of Articles in Geology, Vol. 3) Leningrad, Gostoptekhizdat, 1958. 471 p. (Series: Its: Trudy, vyp. 126) 2,400 copies printed.

Ed.: Kudryavtsev, Nikolay Aleksandrovich; Executive Ed.: Fedotova, M.I.;
Tech. Ed.: Gennad'yeva, I.M.

PURPOSE: The book is intended for petroleum geologists working in Siberia and other petroliferous regions of the USSR and all other specialists operating in the field of oil recovery.

COVERAGE: The present collection of articles covers a large variety of subjects in the field of petroleum geology. Among them are problems in general geology and tectonics, such as studies of the boundaries between Cambrian and Precambrian rocks, methods for differentiating red beds under complex tectonic conditions, the relationship between the Urals and Pay-Khoy and Taymyr, the tectonics of the Carpathian Mountains, including the stratigraphy of different regions of the

Card 1/5

Collection of Articles in Geology (Cont.)

SOV/1385

Lower Permian of Timan, the continental deposits of the Chelyabinsk Region, the Tertiary deposits of Kamchatka, the geological structure and oil-bearing possibilities of different regions of Western and Eastern Siberia and Mangyshlak, and certain problems in geochemistry and hydrogeology. New and interesting material is provided by Ye.A. Kareva on the stratigraphy of the Mesozoic of the Zaural'ye, which, based on paleontological data, permits a breakdown of the brown coal continental deposits of the Chelyabinsk Region into a number of series, thus proving the existence of three coal bearing horizons of different ages in the stratigraphic column. Of particular interest are G.Ye-A. Ayzenshtadt's studies supporting a view diverging from the generally accepted gravitational theory on the growth of salt domes, and T.L. Derviz statement on the Rhaetic-Lias age of the lower horizons of the Mesozoic in the southeastern part of the West Siberian Plain. More than half of the articles are concerned with studies made on the oil-bearing possibilities of the various regions of Siberia, and of oil exploration carried on in that area. The articles are accompanied by diagrams, tables and bibliographic references.

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SOV/1385

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FORN, IN-11.

A. S. M. N.; KHRAMOV, A. I.

Paleomagnetism and paleoclimate of the Russian Platform during
the Carboniferous and Permian periods. Dokl. AN SSSR 137
no. 1:154-157 Nr-Apr '61. (MIRA 14:2)

1. Vsesoyuznyy naftyanoy nauchno-issledovatel'skiy geologorazved-
ochnyy institut. Predstavleno sbudovikom E. I. Straklovym.
(Russian Platform--Paleoclimatology)
(Russian Platform--Magnetism, Terrestrial)

FORSH, N.N.

Stratigraphic division and correlation of the sections of the Tatarian stage in the eastern part of the Russian Platform based on the complex of lithologic, stratigraphic, paleomagnetic, and paleontologic data. Trudy VNIGRI no.204:175-212 '63. (MIRA 16:6)

(Russian Platform--Geology, Stratigraphic)

NALIVKIN, V.D.; RONOY, A.B.; KHAIN, V.Ye.; ZOKOLOV, B.S.; DOMRACHEV,
S.M.; TIKHIY, V.N.; POZNER, V.M.; FORSH, N.N.; LYUTKEVICH,
Ye.M.; SLAVIN, V.I.; SAZONOV, N.I.; SAZONOVA, I.G.;
SHUTSKAYA, Ye.K.; KRASNOV, I.I.; KALENOVA, G.N.; VINOGRADOV,
A.P., glav. red.;

[History of the geological development of the Russian Plat-
form and its margins] Istoriiia geologicheskogo razvitiia
Russkoi platformy i ee obramleniia. Moskva, Nedra, 1964.
251 p. ____ [Maps] Karty. 98l. (MIRA 18:4)

Pravda, Moscow.

THE I BOOK EXPLORATION

SOV/5174

Trudy Sovetskoy kosmicheskoy korabli, materialy, opublikovanyye v gazete "Pravda" (The Second Soviet Cosmic Ship; Materials Published in the Newspaper "Pravda") Moscow, 1960. 198 p. 50,000 copies printed.

Resp. for this Publication: V. Leut and V. Salimov; Tech. Ed.: V. Zagladin.

PURPOSE: This book is intended for the general reader.

COVERAGE: The book is a compilation of articles which appeared in the newspaper Pravda after the launching, orbiting, and recovery of the capsule of the Soviet 4,600 kg spaceship on August 19, 1960. The articles give some details of scientific research undertaken in this flight in the fields of scientific geology, genetics, cosmic radiation, solar radiation, biology, violet radiation, and radiation levels. A description and ultra-photos of the capsule are given. No personalities are mentioned. There are no references.

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FORSK, O.D.

Species of fern new for the flora of the U.S.S.R. Bot. zhur.
49 no.5:744 My '64. (MIRA 17:8)

1. Sudsukhinskiy filial Sikhote-Alinskogo zapovednika,
Primorskiy kray.

VEBER, V.V., professor; GORSKAYA, A.I.; YEGOROV, Ye.N.; MANUCHAROVA, Ye.A.;
MESSINEVA, M.A.; RADCHENKO, O.A.; REMIZOVA, T.S.; ROMM, I.I.;
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SHABAROVA, N.T.; SHCHAPOVA, T.F.; EBERZIN, A.G.; YURIEVICH, I.A.

Results of the comprehensive study of contemporary analogues of oil-
bearing facies. Trudy VNIGI no.2:111-121 '51. (MLRA 10:4)
(Petroleum geology)

FORSH, T.B.

Graphic representation of the chemical composition of surface waters.
Gidrokhim.mat. 24:93 '55. (MIRA 9:4)

1. Laboratoriya ozerovedeniya Akademii nauk SSSR, Leningrad.
(Water, Underground) (Water--Analysis)

FORSH, T.B.

Evaporation and transpiration in the Asu Barya Delta. Trudy
Izv. AN SSSR. 4: 35-170 '67. (MLRA 10:9)

(Asu Barya Delta--Evaporation) (Asu Barya Delta--Plants--Transpiration)

FORSH, T.B.

Graphic method of representing the ionic composition of natural
waters. Trudy Lab. overoved. 5:116-137 '57. (MLRA 10:9)
(Water--Composition)